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IGF2 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1749a

Product Information

Application	WB, IHC, FC, ICC, E
Primary Accession	P01344
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	8H1
Isotype	IgG1
Calculated MW	20140
Description	This gene encodes a member of the insulin family of polypeptide growth factors, which are involved in development and growth. It is an imprinted gene, expressed only from the paternal allele, and epigenetic changes at this locus are associated with Wilms tumour, Beckwith-Wiedemann syndrome, rhabdomyosarcoma, and Silver-Russell syndrome. A read-through INS-IGF2 gene exists, whose 5' region overlaps the INS gene and the 3' region overlaps this gene. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.
Immunogen	Purified recombinant fragment of human IGF2 (AA: 25-180) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	3481
Other Names	Insulin-like growth factor II, IGF-II, Somatomedin-A, T3M-11-derived growth factor, Insulin-like growth factor II, Insulin-like growth factor II Ala-25 Del, Preptin, IGF2
Dilution	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 ICC~~N/A E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	IGF2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	IGF2 (HGNC:5466)
Function	The insulin-like growth factors possess growth-promoting activity (By similarity). Major fetal growth hormone in mammals. Plays a key role in regulating fetoplacental development. IGF2 is influenced by placental lactogen. Also involved in tissue differentiation. In adults, involved in glucose metabolism in adipose tissue, skeletal muscle and liver (Probable). Acts as a ligand for integrin which is required for IGF2 signaling (PubMed:28873464). Positively regulates myogenic transcription factor MYOD1 function by facilitating the recruitment of transcriptional coactivators, thereby controlling muscle terminal differentiation (By similarity). Inhibits myoblast differentiation and modulates metabolism via increasing the mitochondrial respiration rate (By similarity).
Cellular Location	Secreted.
Tissue Location	Expressed in heart, placenta, lung, liver, muscle, kidney, tongue, limb, eye and pancreas.

References

1.Biomarkers. 2011 Jun;16(4):346-54.2.J Cancer Res Clin Oncol. 2011 Feb;137(2):339-45.

Images

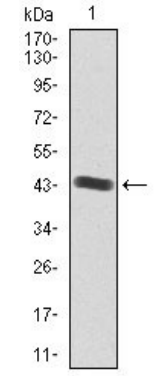


Figure 1: Western blot analysis using IGF2 mAb against human IGF2 recombinant protein. (Expected MW is 43.1 kDa)

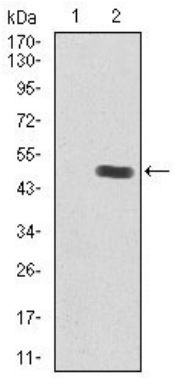
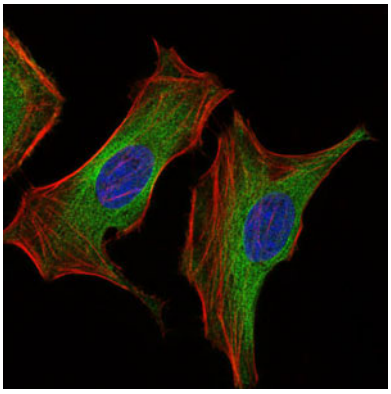


Figure 2: Western blot analysis using IGF2 mAb against HEK293 (1) and IGF2 (AA: 25-180)-hIgGFc transfected HEK293 (2) cell lysate.

Figure 3: Immunofluorescence analysis of HeLa cells using IGF2 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



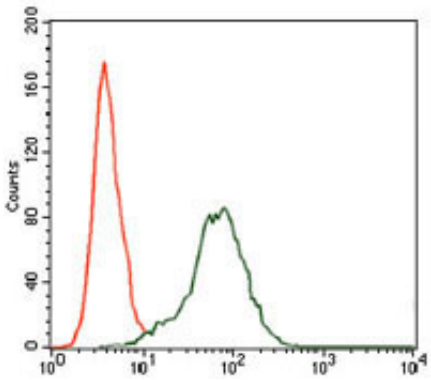


Figure 4: Flow cytometric analysis of HepG2 cells using IGF2 mouse mAb (green) and negative control (red).

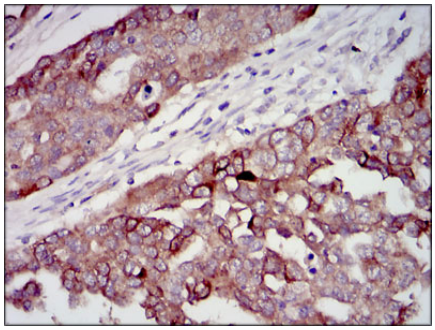


Figure 5: Immunohistochemical analysis of paraffin-embedded ovarian cancer tissues using IGF2 mouse mAb with DAB staining.

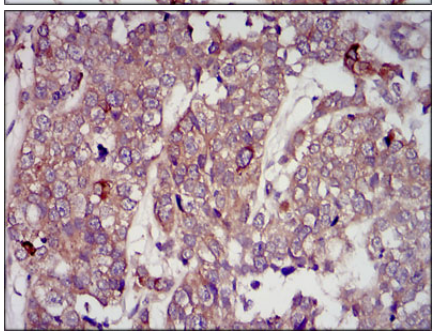


Figure 6: Immunohistochemical analysis of paraffin-embedded bladder cancer tissues using IGF2 mouse mAb with DAB staining.

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